

EXHIBIT 10

IEEE Std 100-1996

The IEEE Standard Dictionary of Electrical and Electronics Terms

Sixth Edition



Published by the
Institute of Electrical and
Electronics Engineers, Inc.

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Sixth Edition

**Standards Coordinating Committee 10, Terms and Definitions
Jane Radatz, Chair**

This standard is one of a number of information technology dictionaries being developed by standards organizations accredited by the American National Standards Institute. This dictionary was developed under the sponsorship of voluntary standards organizations, using a consensus-based process.

ISBN 1-55937-833-6



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How to use this dictionary

The terms defined in this dictionary are listed in *letter-by-letter* alphabetical order. Spaces are ignored in this style of alphabetization, so *cable value* will come before *cab signal*. Descriptive categories associated with the term in earlier editions of IEEE Std 100 will follow the term in parentheses. New categories appear after the definitions (see Categories, below), followed by the designation of the standard or standards that include the definition. If a standard designation is followed by the letter s, it means that edition of the standard was superseded by a newer revision and the term was not included in the revision. If a designation is followed by the letter w, it means that edition of the standard was withdrawn and not replaced by a revision. A bracketed number refers to the non-IEEE standard sources given in the back of the book.

Acronyms and abbreviations are no longer listed in a separate section in the dictionary; rather, they are incorporated alphabetically with other terms. Each acronym or abbreviation refers to its expanded term, where it is defined. Acronyms and abbreviations for which no definition was included in past editions have been deleted from this edition of IEEE Std 100.

Abstracts of the current set of approved IEEE standards are provided in the back of the book. It should be noted that updated information about IEEE standards can be obtained at any time from the IEEE Standards World Wide Web site at <http://standards.ieee.org/>.

Categories

The category abbreviations that are used in this edition of IEEE Std 100 are defined below. This information is provided to help elucidate the context of the definition. Older terms for which no category could be found have had the category "Std100" assigned to them. Note that terms from sources other than IEEE standards, such as the National Electrical Code® (NEC®) or the National Fire Protection Association, may not be from the most recent editions; the reader is cautioned to check the latest editions of all sources for the most up-to-date terminology.

AE
 AHDL
 AMR
 AP
 ATL
 BA
 BT
 C
 CAS
 CE
 CHM
 COM
 CS
 DA
 DEI
 DESG
 DIS
 ED
 EDU
 EEC
 ELM
 EM
 EMB
 EMC
 GRS
 GSD
 IA
 IE
 II
 IM
 IT
 IVHS
 LEO
 LM
 MAG
 MIL
 MM
 MTT
 NEC
 NESC
 NFPA
 NI
 NIR
 NN
 NPS
 ODM
 OE
 PA
 PE
 PEL
 PQ
 PSPD
 PV
 QUL
 R
 RA
 REM

values: logic "0" or logic "1." A data bit may convey control, address, information, or frame check sequence (FCS) data.

(EMB) 1073.3.1-1994, 1073.4.1-1994

(2) The smallest signaling element used by the physical layer for transmission of packet data on the medium. One of the PDUs for the physical layer (the other is the arbitration signal).

(C/MM) 1394-1995

data block *See*: block.

data-break *See*: direct memory access.

data breakpoint A breakpoint that is initiated when a specified data item is accessed. *Synonym*: storage breakpoint. *Contrast*: code breakpoint. *See also*: dynamic breakpoint; epilog breakpoint; programmable breakpoint; prolog breakpoint; static breakpoint.

(C) 610.12-1990

data broadcast An operation wherein participating slaves capture the data that are placed on the data lines by the responding slave during a read cycle.

(C/MM) 1096-1988

data broadcast An operation wherein participating slaves capture the data that are placed on the data lines by the active master during a write cycle.

(C/MM) 1096-1988

data buffer register A register in a central processing unit or peripheral device capable of receiving or transmitting data at different data transfer rates. *See also*: input buffer register.

(C) 610.10-1994

data bus A bus used to communicate data to and from a processing unit or a storage device. *See also*: bidirectional bus.

(C) 610.10-1994

data cache An area of high-speed buffer storage, used to store data and operands. *Contrast*: instruction cache.

(C) 610.10-1994

data card A punch card that contains data to be used by a computer program. *See also*: source data card.

(C) 610.10-1994

data carrier Material that serves as a data medium or to which a data medium is applied and that facilitates the transport of data; for example, a punch card, a disk, or a plastic card with a magnetic surface that serves as the data medium. *See also*: data medium.

(C) 610.10-1994, 610.5-1990

data cell *See*: storage cell.

data certification The determination that data have been verified and validated. *See also*: data producer certification; data user certification.

(C/DIS) 1278.3-1996

data chain *See*: composite data element.

data chain bus A connection by which electrical signals are transmitted and/or received at multiple circuit elements.

(C) 610.10-1994

data channel *See*: input-output channel.

data channels (test pattern language) All memory devices have one or more (up to 16) independent data inputs or outputs. Each of these is called a data channel.

(C/TT) 660-1986w

data character A character used for packet payload or packet header. A data character represents one of the values of a byte, i.e., 0-255 (decimal). Only N_chars are used as data characters. *See also*: link character; normal character.

(BA/C) 1355-1995

data characteristic (software) (software unit testing) An inherent, possibly accidental, trait, quality, or property of data (for example, arrival rates, formats, value ranges, or relationships between field values).

(C/SE) 1008-1987r, 610.12-1990

data circuit A circuit used to transmit data. *Synonym*: duplex circuit.

(C) 610.7-1995

data circuit-terminating equipment (DCE) (1) A device that provides the signal conversion and coding between the data terminal equipment (DTE) and the network carrier facility. Note that in the context of an ITU-T X.25 network, for example, the DCE performs functions at the network end of an access line to the network.

(COM/C/LM) 802.9a-1995, 8802-9-1996

(2) A device that interfaces between the data terminal equipment (DTE) and the line.

(C) 610.7-1995

data code *See*: code.

data collection station *See*: data input station.

data communication equipment (1) The equipment that provides the functions required to establish, maintain, and terminate a connection, as well as the signal conversion, and coding required for communication between data terminal equipment and data circuit.

(COM) 168-1956w

(2) An equipment that transmits data from one point to another.

(C) 610.7-1995

data communications (1) (data transmission) The movement of encoded information by means of communications techniques.

(PE) 599-1985w

(2) A data transfer between data source and data destination via one or more data links.

(C) 610.7-1995

data compaction Any technique used to encode data in order to reduce the amount of storage it requires. *Contrast*: data compression.

(C) 610.5-1990

data compression Any technique used to reduce the amount of storage required to store data. *Contrast*: data compaction.

(C) 610.5-1990

data concentrator A concentrator that permits a common transmission medium to serve more data sources than there are channels available within the transmission medium.

(C) 610.7-1995

data connection The interconnection of two or more data circuits by means of switching equipment to enable data transmission to take place between DTEs. *See also*: virtual data connection.

(C) 610.7-1995

data conversion To change data from one form of representation to another; for example, to convert data from an ASCII representation to an EBCDIC representation.

(C) 610.5-1990

data converter A device whose purpose it is to convert data from one representation to an equivalent representation.

(C) 610.10-1994

data coupling A type of coupling in which output from one software module serves as input to another module. *Synonym*: input-output coupling. *Contrast*: close coupling; common-environment coupling; content coupling; control coupling; hybrid coupling.

(C) 610.12-1990

data cycle (A) (FASTBUS acquisition and control) The portion of a FASTBUS operation in which a master either sends data to or receives data from an attached slave. It begins with the master causing a data sync transition and terminates with the master receiving a data acknowledge transition from the slave. (B) A period in which data are valid and are acknowledged. This occurs when acknowledge is asserted at the end of a transaction and on intermediate acknowledges during a block transfer.

1196-1987

data deciphering key A key used for the decipherment of an (N)-layer SDU. (It is not used to decipher other keys.)

(C/LM) 802.10-1992

data declaration source statements Source statements that reserve or initialize memory at compilation time.

(C/SE) 1045-1992

data definition A description of the format, structure, and properties of a data item, data element, or data structure.

(C) 610.5-1990

data definition language (DDL) (A) A language for describing the organization of data within a database. *Note*: In some software, the logical organization is described; in some, both the logical and physical organizations are described. (B) A language used to describe the logical structure of a database. *Synonyms*: data description language; database description language; schema definition language; schema language. *Contrast*: data manipulation language. *See also*: database manipulation language.

(C) 610.5-1990

SH94459
1-55937-833-6
8 April 1997